

# Work Order ID 91575

**\*91575\***

Page 1

November-02-12 9:16:19 AM

Item ID: D119-646-241

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: W Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3887	B
IIN-D119-646	B

100

0.00

**\*100\***

DC

Document Control

Memo

0.00

Photocopy bluefile & type labels per PPP D119-646-241

CH0001-002

per ECN 12-675

110

0.00

**\*110\***

Skidtubes

Skidtubes

Memo

0.00

1- inspect Mat'L D2500-1-190 for damage

2- Remove 45.3125" from d2500-1-180, deburr ends.

3- Ensure squareness of ends and scribe batch#

**12-11-8**

November-02-12 9:16:19 AM

**Item ID:** D119-646-241

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

**Item Name:** Replacement Skidtube STD w/ Training Wearplates

**Start Date:** 10/12/12      **Start Qty:** 1.00      **\*1\***

**Cust Item ID:**

**Required Date:** 11/16/12      **Req'd Qty:** 1.00      **\* 1 \***

**Customer:**

**Reference:**

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

Chemical Conversion Coat per QSI005 4.1

0.00

**\*120\***

## Memo

0.00

HandFinish

## Hand Finishing

121

QC3- Inspect Part Finish

0.00

**\*121\***

## Memo

0.00

QC

### Quality Control

122

QC5- Inspect part completeness to step on W/O

0.00

**\*122\***

## Memo

0.00

QC

## Quality Control

**DAS**  
**18**  
**8-89**

**DAS**  
18  
9-89

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Item ID: D119-646-241 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Replacement Skidtube STD w/ Training Wearplates  
 Start Date: 10/12/12 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 11/16/12 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

**\*130\***

Skidtubes

Skidtubes

## Memo

0.00

1-Install drill Jig DT9477 drill X-bolt spacer pilot holes using 3/16" drill

2-Open crossbolt spacer holes to finished size as per dwg D3887 (section D-D and E-E) \*\*\*DO NOT OPEN FWD Saddles Holes\*\*\*

3- Deburr, blow out chips from inside of tube.

4 -Bond web in place as per Dwg D3887 & QSI 015.

A/RSikaflex-291 123353

Sikaflex expire date: 13-6-22

Start: 13/01/09 Time: 2:00

Finish: 13/01/09 Time: 9:00

\*\*\*\*\*Adhere for 12 hours\*\*\*\*\*

DC 12/11/14

- DC 13/01/09

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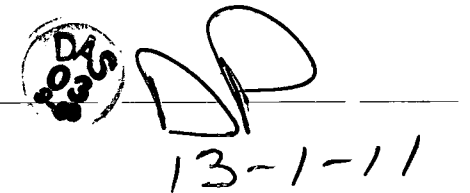
November-02-12 9:16:19 AM

Item ID: D119-646-241 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Replacement Skidtube STD w/ Training Wearplates  
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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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135	QC5- Inspect part completeness to step on W/O	0.00							
<b>*135*</b>									
QC	Memo	0.00							
Quality Control									



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Item ID: D119-646-241

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140

0.00

**\*140\***

Skidtubes

Skidtubes

**Memo**

0.00

1- Bend FWD end of tube using bender 1 and bend prog. D3887.\*\*\*Must use bending aid DT9544, ensure proper positioning\*\*\*

2- Cut FWD end of tube as per dwg D3887.\*\*\*Verify measurment\*\*\*

3- Buff out marks left from bending

4- Drill FWD cap holes using DT8215. DO NOT Open FWD &amp; AFT cap holes

5- Open FWD saddle holes to finished size as per dwg D3887

6- Drill FWD x-bolt spacer holes using DT9816 and open to finished size.  
(VERIFY MEASUREMENT)7- Drill Tow ring hole,holes USING DT9494, Locate from FWD caphole (verify measurement).  
Open to finished size.

8-Drill 1.87 &amp; 3.74" holes using DT9494, locate from FWD cap hole (verify measurement) AS PER DE03905-B-1

9- Open FWD &amp; AFT cap holes to finished size

10- Deburr and blow out chips from inside of tube.

13-1-11

- DC 13/01/14



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Item ID: D119-646-241 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Replacement Skidtube STD w/ Training Wearplates  
Start Date: 10/12/12 Start Qty: 1.00 **\*1\*** Cust Item ID:  
Required Date: 11/16/12 Req'd Qty: 1.00 **\*1\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							
<b>*150*</b>						1	0	13-01-24	DAS 18 9-8
QC	Memo	0.00							
Quality Control									
160		0.00							
<b>*160*</b>									
Skidtubes	Memo	0.00							
Skidtubes	1- Countersink crossbolt spacer holes, and prepare tube for welding, deburr. - DC 13/01/14								
	2-Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to back drill each hole before welding the other side. Use aluminum rod A/RAluminum Rod m122324								BE 13/01/24
	3-Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole.								
	4-Counterbore x-bolt spacer holes as per Dwg D3887.								
	5- Deburr and blow out chips from inside of tube								- DC 13/01/24

2x D1579  
P-100-000-007-B-1

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**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 10/12/12      **Start Qty:** 1.00      **\*1\***

**Cust Item ID:**

**Required Date:** 11/16/12      **Req'd Qty:** 1.00      **\* 1 \***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

**Insp.  
Stamp**

0.00

**\*170\***

QC

## Memo

0.00

## Quality Control

180

QC10- Inspect visual per QSI004- ground welds

0.00

\*180\*

OC

## Memo

0.00

## Quality Control

190

Pressure Wash per QSI005 4.3

0.00

\*190\*

HandFinish

## Memo

0.00

## Hand Finishing



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**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 10/12/12      **Start Qty:** 1.00      **\*1\***

**Cust Item ID:**

**Required Date:** 11/16/12      **Req'd Qty:** 1.00      **\* 1 \***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_      **Date:** \_\_\_\_\_      **Tooling:** \_\_\_\_\_      **Date:** \_\_\_\_\_

Stop \*NR2\*

**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

### Operation Description

## Set Up/ Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

White Gloss(Ref:4.3.5.1) per OSI005 4.3-Alum

0.00

\*200\*

Gloss (Ref: 4.3.5.1) per  
M 123353

0.00

Powdercoat

## Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

210

### QC3- Inspect Part Finish

0.00

**\*210\***

## Memo

0.00

QC

## Quality Control

240

0.00

\*240\*

## Memo

0.00

HandFinish

## Hand Finishing

1-Install wearplates as per Dwg D3887.

2 -Inspect for foreign objects as per QSI 024

3 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-240/-291

✓ Sikaflex expire date:

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Item ID: D119-646-241

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250 <b>*250*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00				1			
255 <b>*255*</b> HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <u>M1123588</u>  Memo	0.00				1 h k	1	11/13/10/29	
256 <b>*256*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00				1			

# Work Order ID 91575

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Item ID: D119-646-241 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Replacement Skidtube STD w/ Training Wearplates  
Start Date: 10/12/12 Start Qty: 1.00 **\*1\*** Cust Item ID:  
Required Date: 11/16/12 Req'd Qty: 1.00 **\*1\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	Identify as per dwg & Stock Location: _____	0.00							
<b>*260*</b>									
Packaging	Memo	0.00	91561	DAS 06 9-88				13/2/11	
Packaging									
270	QC21- Final Inspection - Work Order Release	0.00							
<b>*270*</b>									
QC	Memo	0.00						MLJ 13-02-04	
Quality Control									

913-02-1

# Picklist Print

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Work Order ID: 91575

Parent Item: D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2579 Crossbolt Spacer		Manufactured	No				Each	54.0000		2		3E 13-01-24 B 92473-2	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG001		54							
				62400		22							
				70761		3							
				72199		1							
				72672		7							
				76002		9							
				78371		12							
NAS1149C0332R Washer		Purchased	No			240	Each	2,677.0000	4	4		13/01/24	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST292		2677		M1123759					
				123248		714							
				123355		1963							
D2500-1-190 Ext'n -I' Beam Tube 4"		Manufactured	No			110	Each	66.0000	1	1		12-11-8	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				HALL		66							
				74777		4							
				85483		62							
D3885-1 Standard Web		Manufactured	No			140	Each	7.0000	1	1		De 13 <sup>1</sup> /01/89	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG	B91646	7							
				52421		7							

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Work Order ID: 91575

Parent Item: D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

D3903-1 Manufactured No  
Spacer

160 Each 47.0000 12 12

Location	Loc Qty	Loc Code
LG	44	
87414	43	
88375	1	
LG001	3	
78790	3	

BE13-01-24  
B93285 x12

D3681-1 Manufactured No  
Spacer

160 Each 58.0000 8 8

Location	Loc Qty	Loc Code
LG	48	
80361	1	
87611	47	
LG001	10	
68958	2	
69893	2	
71845	2	
74874	1	
76004	1	
77501	2	

BE13-01-24  
B93371 x8

D2855-3 Manufactured No  
Cap

240 Each 10.0000 2 2

Location	Loc Qty	Loc Code
FP002	10	
52281	2	
75080	3	
86877	5	

B93107  
x2

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Work Order ID: 91575

Parent Item: D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No 240 Each 448.0000

4 4 13/6/12

Location	Loc Qty	Loc Code
FG	5	
122800	5	M1123831
ST350	38	
115835	0	
123525	38	
ST512	405	
115835	7	
116419	28	
117343	13	
117764	7	
117872	2	
119749	23	
120423	28	
121255	23	
121708	179	
122141	80	
122800	15	

D3904-1 Manufactured No 240 Each 217.0000

16 16 13/6/12

Location	Loc Qty	Loc Code
ST069	217	B93237
51875	17	
91581	200	

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Work Order ID: 91575

Parent Item: D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

D3672-1 Manufactured No 240 Each 1,351.0000  
Phenolic Washer

4 del 4 13/01/29

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	10	
85222	10	
FP001	2	
80369	2	
ST061	1339	
72229	4	
76277	21	
83608	500	
<u>85222</u>	334	<u>x4</u>
91325	480	

D3849-041 Manufactured No 240 Each 4.0000  
FWD WEARPLATE ASSY, STD/FLOAR GEAR

1 1393152(1x) del 13/01/29

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	4	
91602	4	

D3849-043 Manufactured No 240 Each 0.0000  
AFT WEARPLATE ASSY, STD GEAR \*  
AN3C46A Purchased No 240 Each 72.0000  
BOLT

1 1393048(1x) del 13/01/29  
8 del 8 13/01/29

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	10	<u>11123930</u>
122843	10	<u>x8</u>
ST354	54	
123116	54	
ST355	8	
122204	8	

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Work Order ID: 91575

Parent Item: D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/12/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

MS21043-3  
Nut

Purchased No

240 Each 785.0000

8

8

13/01/29

## Location

## Loc Qty

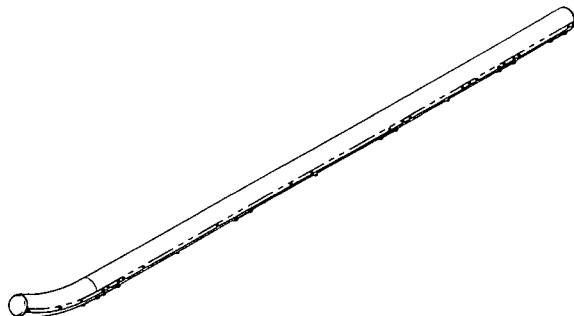
## Loc Code

FG	72
103691	72
ST301	79
118077	2
118614	7
118686	30
119758	20
121255	20
ST315	634
122993	145
123525	489

11123899

XO





**D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD (SHOWN)**  
**D3887-043 STANDARD SKIDTUBE ASSY WITH WEAPLATE (SIMILAR)**  
**D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)**

**NOTES:**

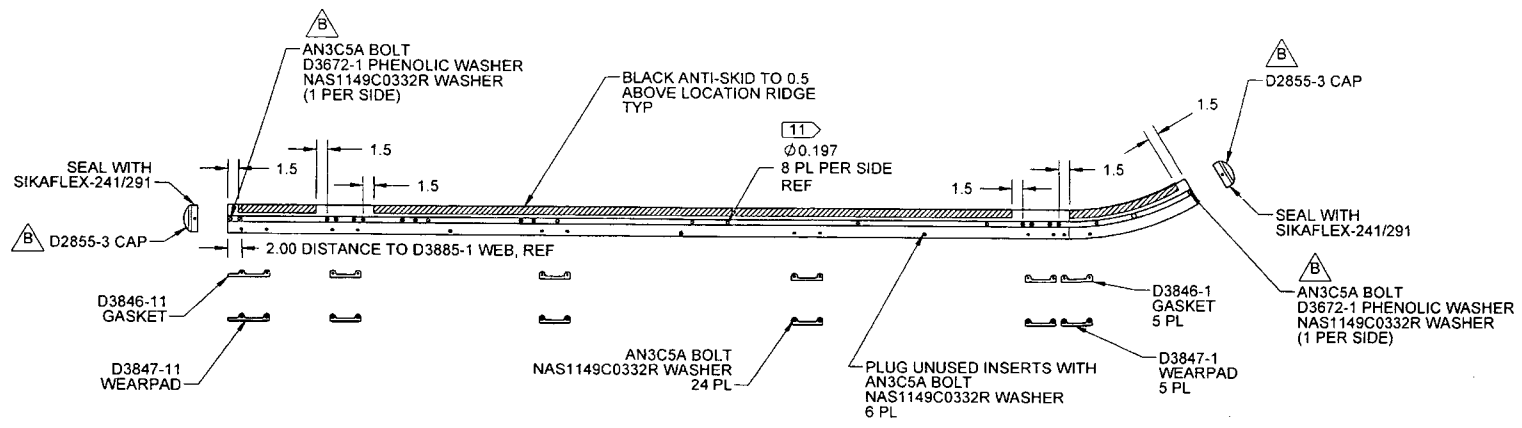
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-1 WEB  
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3887-041 = 32.0 lbs  
D3887-043 = 37.0 lbs  
D3887-045 = 38.1 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8931 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3887-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/-291.

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3887-041	STD SKIDTUBE ASSY WITH WEARPAD
2		X		D3887-043	STD SKIDTUBE ASSY WITH WEARPLATE
3			X	D3887-045	STD SKIDTUBE ASSY WITH TRAINING WEARPLATE
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	4	4	4	D3672-1	PHENOLIC WASHER
14	8	8	8	D3681-1	SPACER
15	5			D3846-1	GASKET
16	1			D3846-11	GASKET
17	5	5		D3847-1	WEARPAD
18	1	1		D3847-11	AFT WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-047	AFT WEARPLATE ASSY
22			1	D3849-041	FWD TRAINING WEARPLATE ASSY
23			1	D3849-043	AFT WEARPLATE ASSY
24	1	1	1	D3885-1	STANDARD WEB
25	1	1		D3887-11	STANDARD SKIDTUBE
26			1	D3887-13	STANDARD SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
41	30	30		ALS4-1032-130	INSERT
42	34	34	4	AN3C5A	BOLT
43			8	AN3C46A	BOLT
44	34	34		NAS1149C0332R	WASHER (OR AN960C10L)
45			8	MS21043-3	NUT

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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 91575 MLJ  
12-10-15

RELEASED  
10/16/15

B	ALS4-1032-130 WAS AELS-1032-130, ZN C4-1, C5-7, C3-7; ADD DT8931, ZN A6-1; ADD 134-04, ZN C4-8; D2855-3 WAS D2575 (ZN D4-1, C7-2, C2-2, C7-3, C2-3, C7-4, C2-4); AN3C5A WAS AN3C46A (ZN C6-2, C2-2, C6-3, C2-3, C6-4, C2-4)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 1 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 STD SKIDTUBE ASSY	NTS
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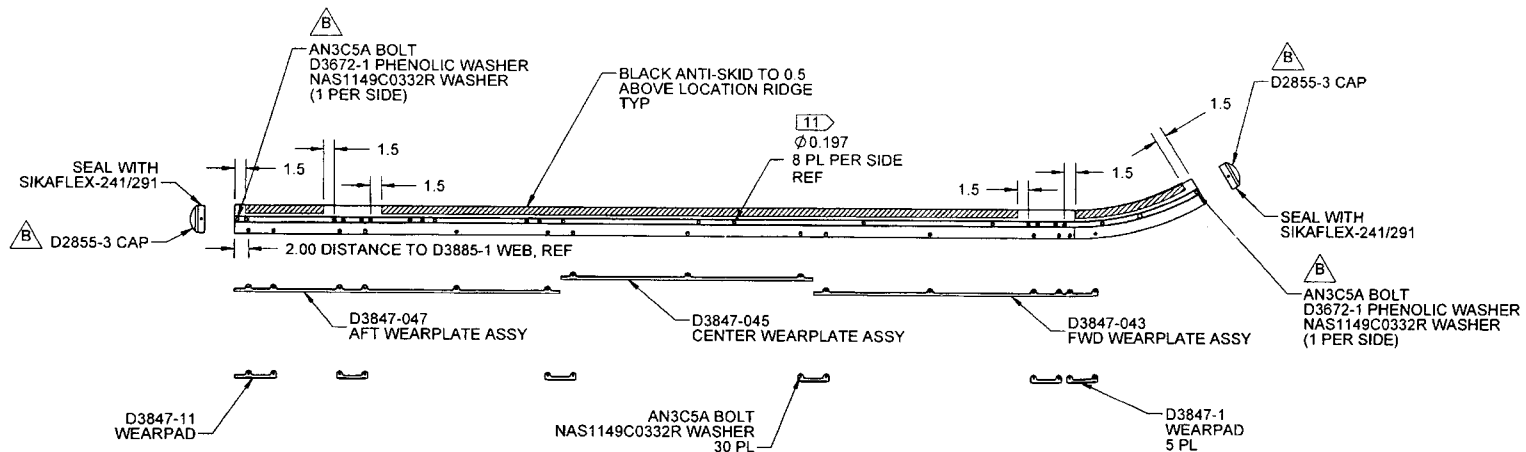


**D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD**  
(MAKE FROM D3887-11)

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2/10/15

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MFG. APPR.	<i>[Signature]</i>	<b>D3887</b>	SHEET 2 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>A119 STD SKIDTUBE ASSY</b>	NTS
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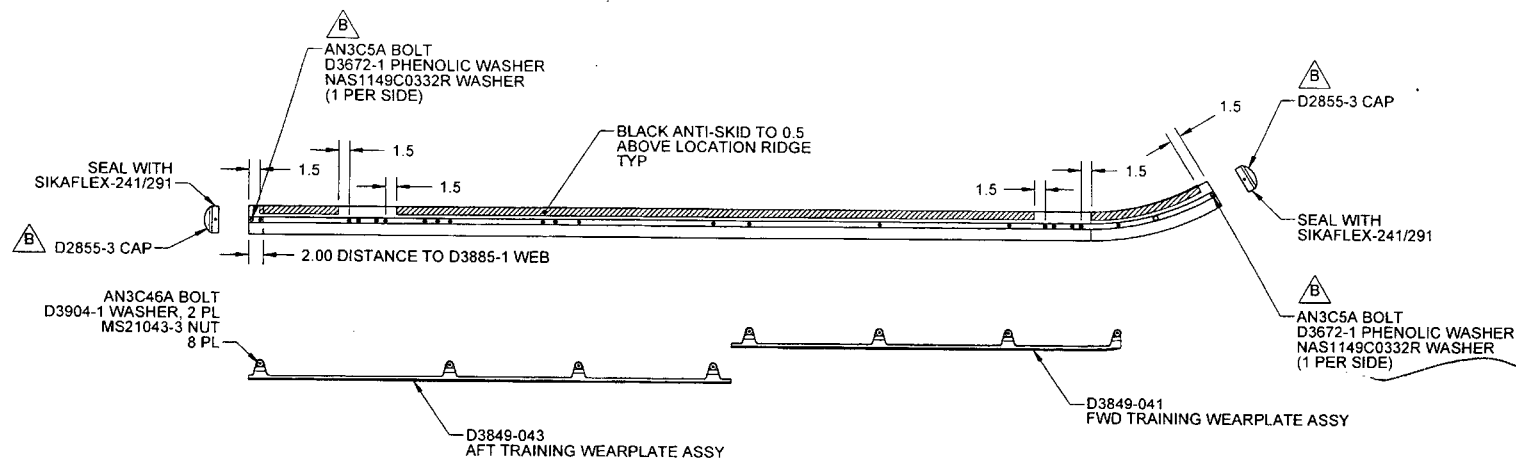


**D3887-043 STANDARD SKIDTUBE ASSY WITH WEARPLATE**  
(MAKE FROM D3887-11)

RELEASED  
29/07/15

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MFG. APPR.	RF	D3887	SHEET 3 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 STD SKIDTUBE ASSY	NTS
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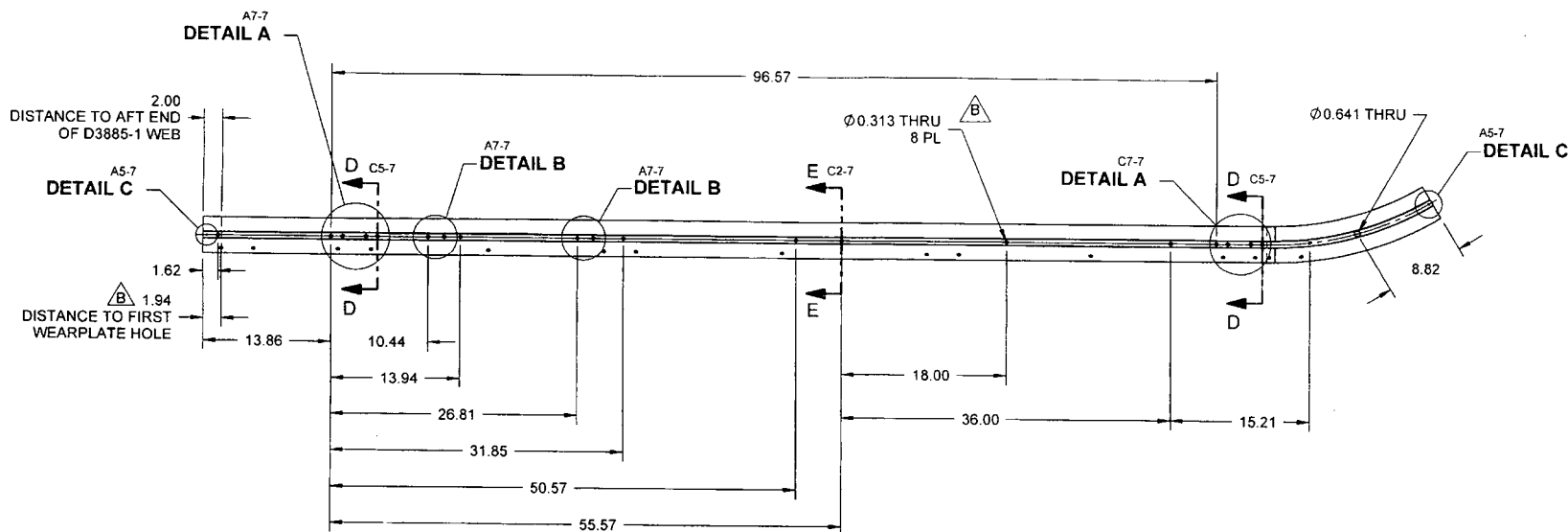


**D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE**  
(MAKE FROM D3387-13)

RELEASED  
09/07/13

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MFG. APPR.	RF	D3887	SHEET 4 OF 8
APPROVED	RF	TITLE	SCALE
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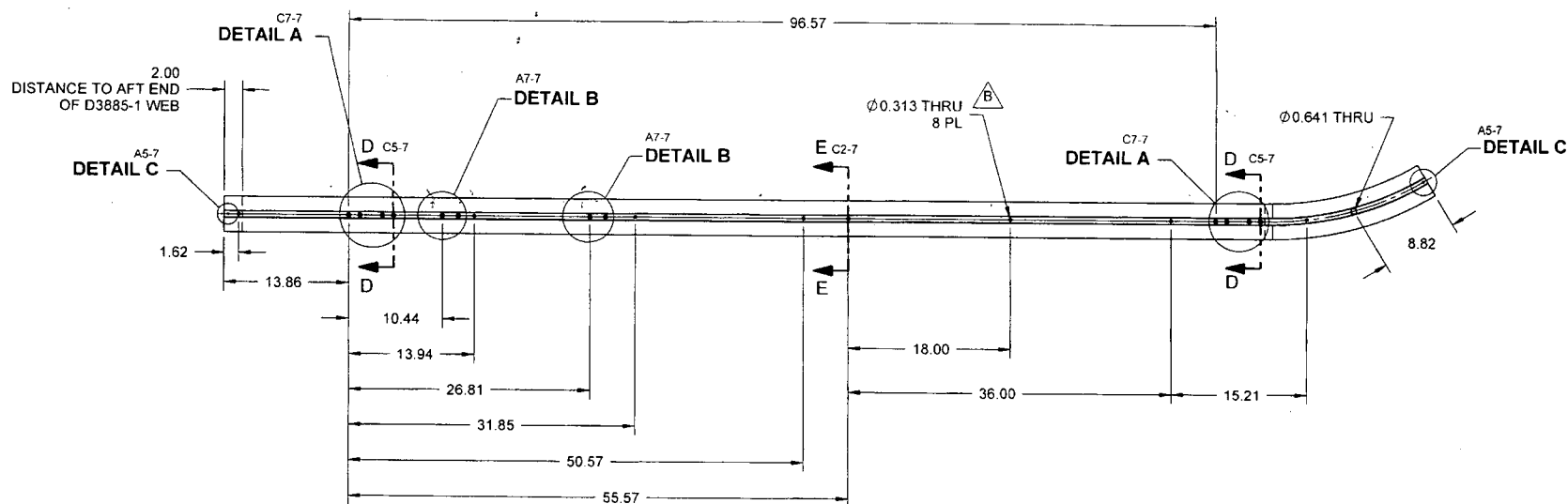


**D3887-11 DRILLING DETAIL**  
(MAKE FROM D3887-1)

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MFG. APPR.	RF	D3887	SHEET 5 OF 8
APPROVED	RF	TITLE	SCALE
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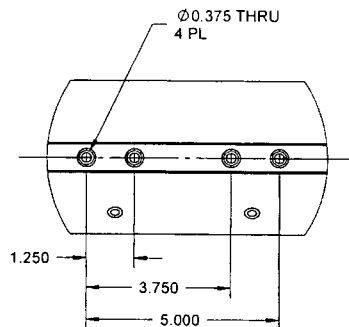


**D3887-13 DRILLING DETAIL**  
(MAKE FROM D3887-1)

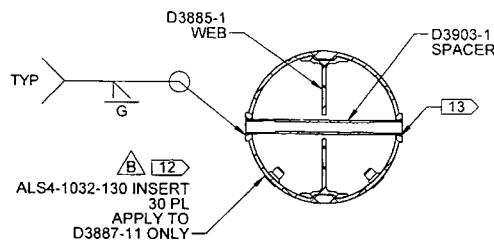
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9/15/15

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 6 OF 8
APPROVED	RF	TITLE	SCALE
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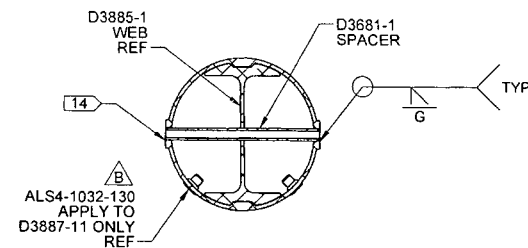
91575



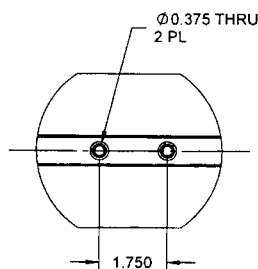
**DETAIL A**  
SCALE 4X  
D7-5  
C3-5  
D7-6  
C3-6



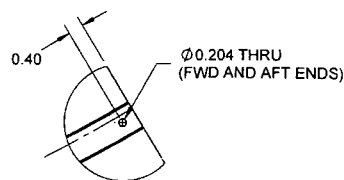
**SECTION D-D**  
SCALE 4X  
C7-5  
C3-5  
C7-6  
C2-6  
(FOR 12 X Ø0.375 HOLES PER SKIDTUBE)



**SECTION E-E**  
SCALE 4X  
C4-5  
C4-6  
(FOR 8 X Ø0.313 HOLES PER SKIDTUBE)



**DETAIL B**  
SCALE 4X  
C6-5  
C5-5  
C6-6  
C5-6



**DETAIL C**  
TYPICAL  
SCALE 4X  
C8-5  
C1-5  
C8-6  
C1-6

**NOTES:**

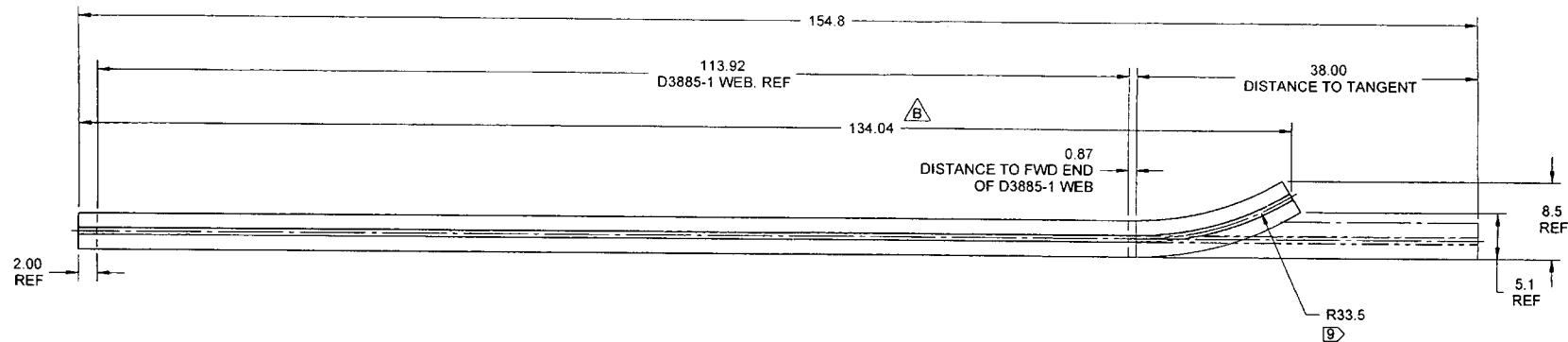
- 13) AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:  
i) CHAMFER HOLES Ø0.475 x 45°  
ii) INSERT D3903-1 SPACER  
iii) WELD INTO PLACE AND GRIND FLUSH  
iv) C'BORE TO 0.313 x 0.75 DEEP  
v) DEBURR HOLES

- 14) AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.313 HOLES ONLY:  
vi) CHAMFER HOLES Ø0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)  
vii) INSERT D3681-1 SPACER  
viii) WELD INTO PLACE AND GRIND FLUSH  
ix) DEBURR HOLES

RELEASED  
09/07/2009

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO. <b>D3887</b>	REV. B
MFG. APPR.	RF	SHEET 7 OF 8	
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	<b>A119 STD SKIDTUBE ASSY</b>	NTS
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**D3887-1 BEND DETAIL**  
(MAKE FROM D2500-1-190 EXTRUSION)

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09/07/15

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 8 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 STD SKIDTUBE ASSY	NTS
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DRAWING NO. D3887	TITLE A119 STD SKIDTUBE ASSY	REV. B	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3887-B-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED <i>q</i>	MFG. APPR. <i>q</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 12.10.29	DATE 12.10.29	DATE 12.10.30	DATE 12.10.30		DATE 12.10.30		

**PURPOSE:**

MODIFICATION OF EXISTING DESIGN TO ALLOW INSTALLATION OF CROSSBOLT SPACERS FOR FORWARD GROUND HANDLING EQUIPMENT.

**PARTS LIST:**

ADD THE FOLLOWING:

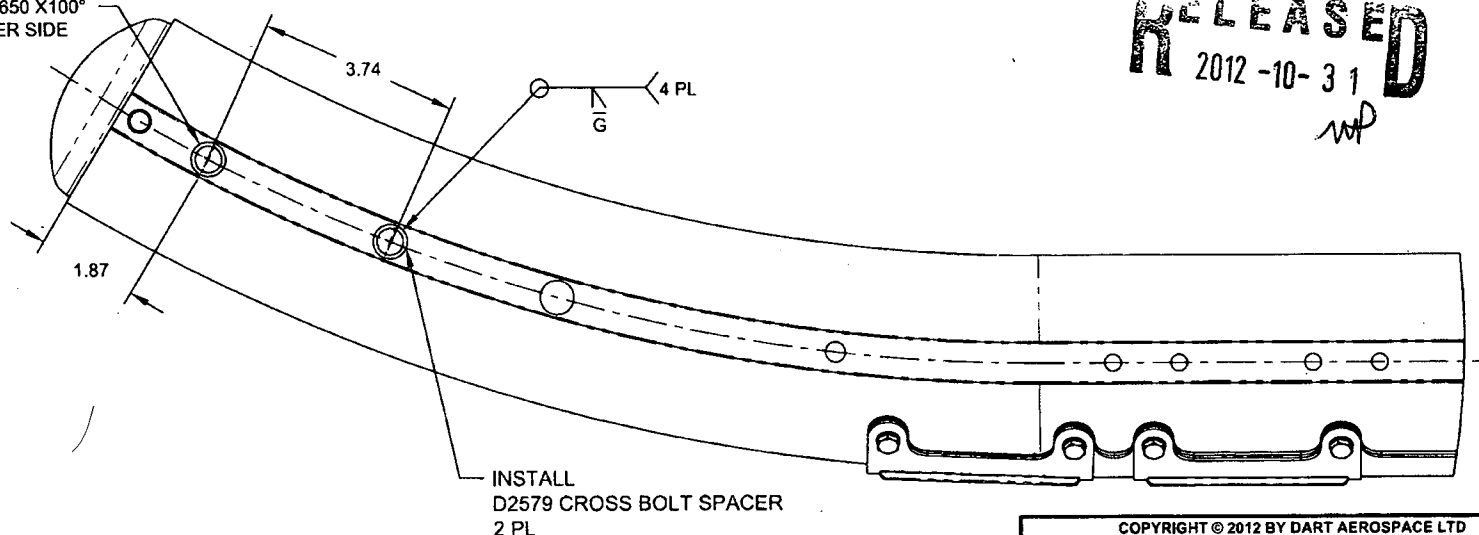
ITEM	QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
	X			D3887-041	STD SKIDTUBE ASSY WITH WEARPAD
		X		D3887-043	STD SKIDTUBE ASSY WITH WEARPLATE
			X	D3887-045	STD SKIDTUBE ASSY WITH TRAINING WEARPLATE

10	2	2	2	D2579	CROSS BOLT SPACER
----	---	---	---	-------	-------------------

ADD THE DRILLING DETAIL BELOW TO DRILLING INFORMATION (SHEETS 5 & 6):

ADD CROSSBOLT SPACER INSTALLATION INFORMATION TO -041 THRU -045 (SHEETS 2 - 4):

DRILL Ø0.500 THRU  
CSK Ø0.650 X100°  
2 PL PER SIDE



RELEASED  
2012-10-31  
*wp*

NO. 310

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job #: 93226  
Part #: A119-646-241  
Description: Skid tube  
Welding Process: Tig ☒ Mig ☐  
Base material: Alum  
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual:	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>
Incomplete Penetration:	pass	<input type="checkbox"/>	fail	<input type="checkbox"/>
Incomplete Fusion:	pass	<input type="checkbox"/>	fail	<input type="checkbox"/>
Cracks:	pass	<input type="checkbox"/>	fail	<input type="checkbox"/>
Overlap (cold lap)	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>
Undercut:	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>
Pin holes:	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>
Porosity (surface):	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>
Coloration:	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>
Burn through:	pass	<input checked="" type="checkbox"/>	fail	<input type="checkbox"/>

Qualifier David David Date of Test Coupon 12.12.12  
Welder Barclay Elliott Date of Test Coupon 12.12.12

The above named individual is qualified in accordance with AWS D17.1.2001 to weld